City of Cincinnati



March 10, 2008

FOR YOUR INFORMATION MEMO

To: Mayor and Members of City Council

From: Milton Dohoney, Jr., City Manager

Subject: Associated Press Story: "Pharmaceuticals Found in Drinking Water"

You may have picked up in this morning's newspaper or on the TV news that the Associated Press (AP) released a story today about concerns with pharmaceuticals found in drinking water. Today's story is the first of a three-part series. As we understand it, AP will be releasing another story tomorrow about the impact of pharmaceuticals on wildlife, followed by a story on Wednesday about how water can be treated for pharmaceuticals. The AP story talks about water utilities around the country but does cite Cincinnati as an area where pharmaceuticals have been found in the water.

The Greater Cincinnati Waterworks (GCWW) has have been working with the AP for several weeks as they have been developing this story. In fact the data they use to cite that pharmaceuticals are found in our **source** water came directly from GCWW. GCWW regularly tests its source waters for a variety of substances, including pharmaceuticals. GCWW has not found pharmaceuticals in their **finished or drinking** water. GCWW research has shown that granular activated carbon (GAC) is very effective at removing them. GCWW has been the world leader in developing GAC technology and has been carbon filtering water from the Ohio River since 1992.

GCWW has also found low level traces of caffeine in our finished water. Caffeine is not considered a pharmaceutical and can be found in coffee, tea, soft drinks, chocolate, and other foods.

Pharmaceuticals in source water supplies, including lakes, river and streams, are a world-wide issue. Currently GCWW is conducting a research project with the government of the Netherlands on improved methods of treating for endocrine disruptors, which includes pharmaceuticals. GCWW is interested in learning if there are better, more cost effective methods for treating these types of contaminants. The Dutch government came to the GCWW because of its international reputation on water treatment research and specifically GAC technology.

Attached are key points from GCWW regarding pharmaceuticals in water.

Copy: David E. Rager, Director, Greater Cincinnati Water Works

Key Points from GCWW on Pharmaceuticals in Water

- 1) Greater Cincinnati Water Works (GCWW) puts the highest priority on providing customers with a plentiful supply of the highest quality water. Our water has always met or exceeded all state and federal health standards for drinking water.
 - We have tested our source water from the Ohio River and found some trace levels of four pharmaceuticals. The pharmaceuticals are in the parts per trillion range. One part per trillion is the equivalent of one second in 32,000 years.
 - We have also tested our treated drinking water and only found caffeine, and that was in trace amounts, also in the part per trillion range.
 - Greater Cincinnati Water Words (GCWW) performs an average of 600 tests per day throughout the system to ensure safe drinking water.
- 2) GCWW uses full-scale granular activated carbon (GAC) treatment with on-site reactivation. This method is cited in studies as being extremely effective in removing substances such as those reported in the news article.
- 3) GCWW has been actively involved in national and international research efforts to understand and confirm that our drinking water remains safe, and to develop new means of removing these substances if they become a problem in the future.
- 4) These substances are being found now because water professionals have the technology today to detect more substances at lower levels than ever before. As analytical methods improve, pharmaceutical compounds and personal care products are being found at very low levels in many of our nation's lakes, rivers, and streams.
- 5) GCWW performs tests throughout the system each day to ensure safe drinking water.
 - Source waters are tested routinely to detect contaminants before they enter treatment plants.
 - Water quality experts test the water after each stage of the treatment process.
 - Water samples are collected in the distribution system to monitor the quality of water once it has left the treatment plant.
 - Monitors are located throughout our treatment plants and in the distribution system to continuously monitor the water quality.
- 6) This issue should remind us of how precious our source waters are and the need to protect them from harmful substances. As a society we should encourage protection of the source waters from contaminants and substances such as these. The best way to ensure safe water at the tap is to keep our source waters clean.